REMARKS

Claims 1-13 are pending in the present application. Claims 2-5 are amended to correct a typographical error affecting dependency. Claims 8-13 are pending, but withdrawn from consideration as being directed to an allegedly non-elected invention.

I. Disposition of Claims

The Office Action states:

> The amendment filed on November 26, 2003 was not completely proper. New claims 8-13 should have been renumbered as claims 16-23, and claims 8-15 should have been canceled. However, in order to speed up the prosecution process, claims 8-13 from paper No. 10, filed on November 26, 2003 will be addressed as new claims 8-13. Claims 14 and 15 from paper No. 7, filed on October 20, 2003 have been canceled.

Office Action, dated January 8, 2004. Applicants respectfully disagree. The amendment filed on October 20, 2003, which added claims 8-15, was found to be non-responsive. Therefore, the supplemental response filed November 26, 2003, instructed to consider the amendments **in place of** the amendments filed on October 26, 2003. Therefore, claims 8-13 were properly added in the response filed November 26, 2003.

II. Objection to Drawings

The Office Action objects to **Figure 5**, because the drawing allegedly reflects a vertical storage cell arrangement. However, **Figure 5** is clearly shown and described as a **cross section or side view** of a storage library. It would be readily apparent to a person of ordinary skill in the art that a cross sectional view of a storage library having horizontal arrays of storage cells would appear as shown in **Figure 5**. The objection to the drawing ignores the idea of perspective. That is, if Applicants were to modify the perspective of **Figure 5** to show the horizontal arrays of storage cells, the drawing would be identical to one of **Figures 1** and **4**. Applicants suggest that **Figure 5** should be viewed as an alternate view of the storage libraries shown in **Figures 1** and **4**.

III. Objection to the Claims

The Office Action states:

> Claims 2-5 are objected to under 37 CFR 1.75(c), as being of improper dependent from for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claims(s) in independent form. Method claims 2-5 are improperly dependent upon apparatus claims 8 and 9. Therefore, claims 2-5 have been withdrawn from further consideration.

Office Action, dated January 8, 2003. Claims 2-5 are amended to correct their dependency. However, it is unclear why claims 2-5 are indicated as being withdrawn from consideration. Clearly, claims 2-5 must have been considered in order for the objection to have been made. Furthermore, since claims 2-5 recite a "method" in the preamble, and the Examiner uses this as a basis for concluding that dependency upon claims 8 and 9 is improper, it is clear that claims 2-5 are meant to be dependent upon a method claim. To give the claims their broadest reasonable interpretation, the Examiner could easily and reasonably have assumed that claims 2-5 were meant to be dependent upon claim 1. In fact, since the claims were not rejected under 35 U.S.C. § 112, the Examiner evidently found the claims to be clear and unambiguous. Therefore, Applicants respectfully request entry of the amendment to correct the dependency of claims 2-5 and respectfully requests these claims be examined.

IV. Restriction

The Office Action requires a restriction to one of the following sets of claims:

I. Claims 1-7, allegedly drawn to a method of scaling a storage library, classified in class 700, subclass 214;

II. Claims 8-13, allegedly drawn to a scalable storage library with the particulars of the cell arrays, robot mechanism, and cartridge player, classified in class 369, subclass 30, 39, or 75.1.

Invention I is elected by original presentation. Applicants respectfully traverse the restriction requirement.

Applicant respectfully disagrees with the classification of the alleged inventions. Class 700 is defined as data processing: generic control systems or specific applications,

Subclass 214 is defined as "Article storing, retrieval, or arrangement (e.g., warehousing, automated library)." Applicants submit that both inventions, that is claims 1-13 can be properly classified in class 700, subclass 214.

Class 369 is defined as dynamic information storage or retrieval. The definition for class 369 states:

> A. This is the generic class for processes of and apparatus for the storage or retrieval of arbitrarily variable information (as defined in the glossary below) which is retained in a storage medium by variation of a physical characteristic thereof. The information is stored or retrieved by causing or sensing a variation of a physical characteristic of the storage medium by a transducer having relative motion along a continuous path.
>
> > (1) Note. The record carrier must have continuous physical extent over the path of movement and be able to store a time-varying information signal. Static or discrete systems are classified elsewhere (see References to Other Classes, below).
> >
> > (2) Note. The characteristic variation is one which must be retrievable by a transducer. Such variation producing only a directly perceptible indication (e.g., a graph), is classified elsewhere (see References to Other Classes, below).
>
> B. This class includes processes and apparatus for the copying or editing of a storage medium within the above definition limited to such copying or editing including a step of storage or retrieval by relative motion.
>
> C. This class includes the record carrier, per se, having particular information storage structure.

Neither alleged invention I nor alleged invention II is specifically directed to the storage or retrieval of arbitrarily variable information which is retained in a storage medium **by variation of a physical characteristic thereof.** Rather, both alleged invention I and alleged invention II are directed to storage libraries and **not** to the actual storage by variation of a physical characteristic of a storage medium.

Furthermore, claim 1 recites, "wherein each horizontal storage cell array is comprised of storage cells arranged in a horizontal plane of rows and columns, at least one media cartridge player, and at least one robot mechanism that moves along a horizontal storage cell array and can dismount cartridges from storage cells to be transported to the at least one media cartridge player and mount cartridges transported from the at least one media cartridge player into cartridge storage cells." Claim 8, in

alleged invention II, recites, "a plurality of horizontal storage cell arrays, wherein each horizontal storage cell array is comprised of storage cells arranged in a horizontal plane of rows and columns," "at least one media cartridge player," and "at least one robot mechanism that moves along the horizontal storage cell array and can dismount cartridges from storage cells to be transported to the at least one media cartridge player and mount cartridges transported from the at least one media cartridge player into cartridge storage cells." Even assuming, *arguendo*, that invention I is correctly classified in class 700, subclass 214, invention II is equally as applicable to class 700, subclass 214.

Since, the alleged inventions may be classified in the same class and subclass(es), the inventions have not acquired a separate status in the art and restriction is not proper. Certainly, a competent search of alleged invention I would encompass the subject matter of alleged invention II, and *vice versa*. Therefore, examining both of the alleged inventions would not present an undue burden on the Examiner.

For the above reasons, it is respectfully requested that the Restriction Requirement be withdrawn.

V. 35 U.S.C. § 102, Anticipation

The Office Action rejects claims 1 and 7 under 35 U.S.C. § 102 as being anticipated by Ryan 6,457,928 and Ryan 6,438,623 (incorporated into Ryan '928 by reference). This rejection is respectfully traversed.

As to claims 1 and 7, the Office Action states:

> Ryan '928 discloses a method of scaling a storage library per claimed invention. The method comprises providing the library having a plurality of horizontal storage cell arrays, wherein each horizontal storage cell array is comprised of storage cells arranged in a horizontal plane of rows and columns. The library comprises plurality of media cartridge players and plurality of robot mechanism that move along a horizontal storage cell array. The vertical distance between the horizontal storage cell arrays is limited by the size of the robot mechanisms (Figure 1 of Ryan '928 and Figures 103 of Ryan '623). The robot mechanisms can dismount cartridges from storage cells to be transported to the at least one media cartridge player and mount cartridges transported from the at least one media cartridge player into cartridge storage cells. The method comprises increasing the horizontal width and horizontal length of the library by increasing the horizontal width and the horizontal length of the storage cell arrays.

Office Action, dated January 8, 2003. Applicants respectfully disagree. The Office Action cites Figures 1-3 of Ryan ('623) as showing a plurality of horizontal storage cell arrays, wherein each horizontal storage cell array is comprised of storage cells arranged in a horizontal plane of rows and columns. These figures are as follows:

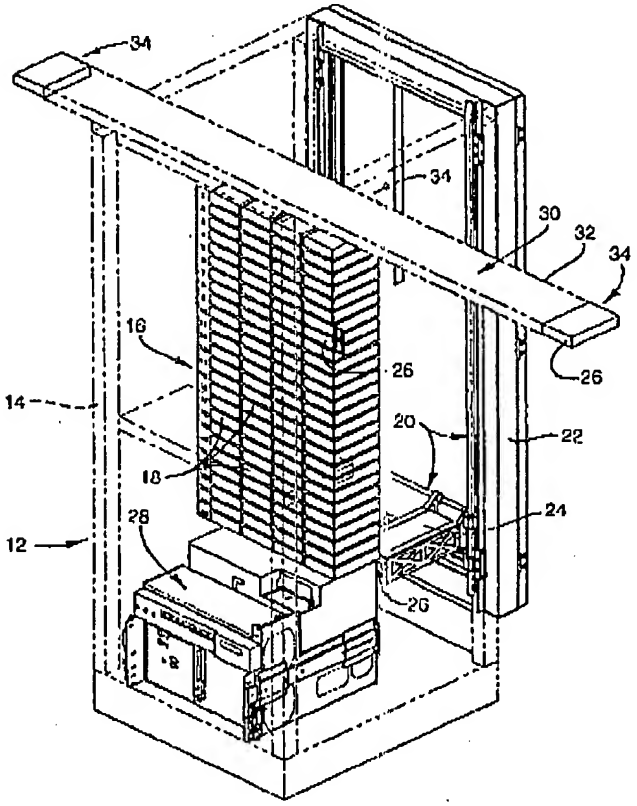

FIG. 1

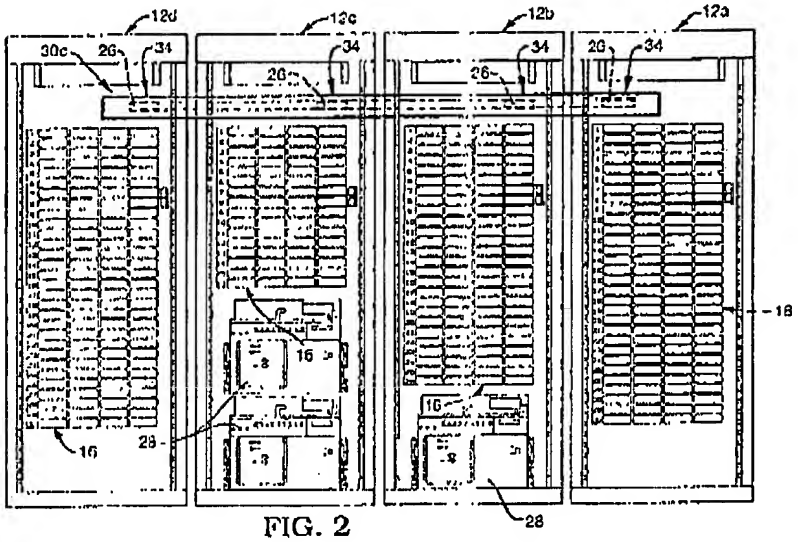

FIG. 2

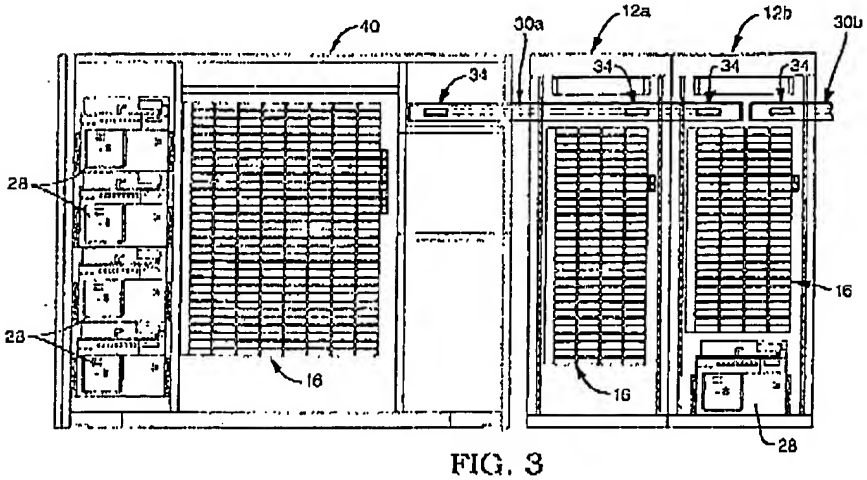

FIG. 3

Ryan ('623) shows a library commonly referred to as an "X-Y" library. That is, the library is a vertical wall of storage slots with a floor mounted robot (not shown) and an overhead transfer unit to move data cartridges horizontally between library cabinets. The library in Ryan ('623) is shown to have data storage slots that are themselves oriented horizontally; however, Ryan ('623) fails to teach or suggest a plurality of horizontal storage cell arrays, wherein each horizontal storage cell array is comprised of storage cells arranged in a horizontal plane of rows and columns, as alleged in the Office Action. The Office Action proffers no analysis as to why the clearly vertical wall of storage cells

is somehow equivalent to the plurality of horizontal storage cell arrays of the presently claimed invention.

The Office Action also cites Figure 1 of Ryan ('928) as showing a plurality of horizontal storage cell arrays, wherein each horizontal storage cell array is comprised of storage cells arranged in a horizontal plane of rows and columns. This figure is as follows:

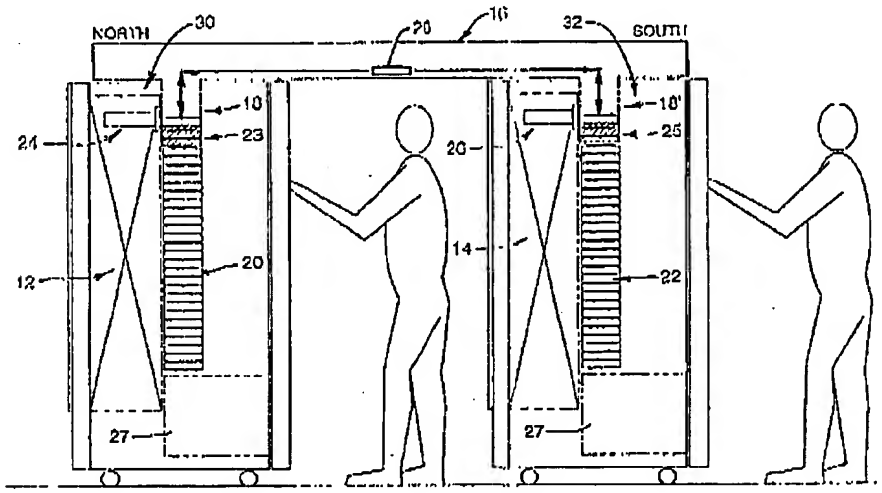

FIG. 1

Ryan ('928) also clearly shows a vertical library. That is, the library is a vertical wall of storage slots. The library in Ryan ('928) is expandable in horizontal depth by adding row upon row of vertical library walls. However, Ryan ('928) fails to teach or suggest a plurality of horizontal storage cell arrays, wherein each horizontal storage cell array is comprised of storage cells arranged in a horizontal plane of rows and columns, as alleged in the Office Action. The Office Action proffers no analysis as to why a vertical wall of storage cells is somehow equivalent to the plurality of horizontal storage cell arrays of the presently claimed invention.

The applied references fail to teach or suggest each and every claim limitation. Therefore, claim 1 is not anticipated by Ryan ('623) or Ryan ('928). Since claims 2-7 depend from claim 1, the same distinctions between Ryan ('623) or Ryan ('928) and the invention recited in claim 1 apply for these claims. Additionally, claims 2-7 recite other additional combinations of features not suggested by the reference.

Therefore, Applicants respectfully request withdrawal of the rejection of claims 1 and 7 under 35 U.S.C. § 102.

Furthermore, Ryan ('623) and Ryan ('928) do not teach, suggest, or give any incentive to make the needed changes to reach the presently claimed invention. Ryan ('623) and Ryan ('928) actually teach away from the presently claimed invention because they teach vertical walls of storage cells, as opposed to a plurality of horizontal storage cell arrays, wherein each horizontal storage cell array is comprised of storage cells arranged in a horizontal plane of rows and columns, as in the presently claimed invention. Absent, the Examiner pointing out some teaching or inventive to implement Ryan ('623) or Ryan ('928) with horizontal storage cell arrays, one of ordinary skill in the art would not be led to modify Ryan ('623) or Ryan ('928) to reach the present invention when the references are examined as a whole. Absent some teaching, suggestion, or incentive to modify Ryan ('623) or Ryan ('928) in this manner, the presently claimed invention can be reached only through an improper use of hindsight using Applicants' disclosure as a template to make the necessary changes to reach the claimed invention.

VI. 35 U.S.C. § 103, Obviousness

The Office Action rejects claim 6 under 35 U.S.C. § 103 as being unpatentable over Ryan 6,457,928 and Ryan 6,438,623 (incorporated into Ryan '928 by reference). This rejection is respectfully traversed.

As to claim 6, the Office Action states:

> Ryan '928 discloses all method steps per claimed invention. However it is silent as to the specific of increasing the vertical height of the library by vertically stacking additional horizontal storage cell arrays, and wherein the vertical distance between the horizontal storage cell arrays is limited by the size of the robot mechanism.
>
> It would have been obvious for a person with ordinary skill in the art, at the time the invention was made, to have vertically stacked additional storage cell arrays to Ryan '928 library because it obviously increases the library storage capacity vertically. Such modification would only involve a duplication of the horizontal storage cell array vertically.

Office Action, dated January 8, 2003. Applicants respectfully disagree. The mere fact that a prior art reference can be readily modified does not make the modification obvious unless the prior art suggested the desirability of the modification. *In re Laskowski*, 871

F.2d 115, 10 U.S.P.Q.2d 1397 (Fed. Cir. 1989) and also *see In re Fritch*, 972 F.2d 1260, 23 U.S.P.Q.2d 1780 (Fed. Cir. 1992) and *In re Mills*, 916 F.2d 680, 16 U.S.P.Q.2d 1430 (Fed. Cir. 1993). The Office Action may not merely state that the modification would have been obvious to one of ordinary skill in the art without pointing out in the prior art a suggestion of the desirability of the proposed modification. In this case, the prior art cannot possibly suggest the modification of stacking horizontal storage cell arrays, because the references do not even contemplate horizontal storage cell arrays, as recited in the instant claims.

Furthermore, Ryan ('623) and Ryan ('928) actually teaches away from the presently claimed invention since Ryan ('623) and Ryan ('928) direct one to vertical walls of storage cells rather than a plurality of horizontal storage cell arrays, wherein each horizontal storage cell array is comprised of storage cells arranged in a horizontal plane of rows and columns, as in the claimed invention. *See In re Hedges*, 228 U.S.P.Q. 685 (Fed. Cir. 1986). Thus, one of ordinary skill in the art would not be motivated to make the changes proposed by the Office Action.

Therefore, Applicants respectfully request withdrawal of the rejection of claim 6 under 35 U.S.C. § 103.

VII. Conclusion

It is respectfully urged that the subject application is patentable over the prior art of record and is now in condition for allowance.

The Examiner is invited to call the undersigned at the below-listed telephone number if in the opinion of the Examiner such a telephone conference would expedite or aid the prosecution and examination of this application.

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Respectfully submitted,

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